MATH 10250 Quiz 1 **NAME:**
June 20, 2018

You have **10 minutes** for the quiz. Please show your work and write neatly.
NO CALCULATOR please!

---

1. Rewrite the expression using only positive exponents

$$\begin{aligned}\left(x^{-5}y\right)^{-3/2} &= x^{15/2}y^{-3/2} \\ &= \frac{x^{15/2}}{y^{3/2}}\end{aligned}$$

2. Find the roots of

$$x^3 + 2x^2 - 3x = 0$$

We factor:

$$\begin{aligned}x^3 + 2x^2 - 3x &= x(x^2 + 2x - 3) \\ &= x(x+3)(x-1).\end{aligned}$$

Thus, the roots of the polynomial are $x = -3,\ 0,$ and 1.